This guide contains a wealth of information for preparing folks for the conference. We would recommend that a copy of it be placed on the MLTI Device of every Conference participant in your Team.

## *Welcome to the Conference!*

**Thanks for being part of the 11th Annual MLTI Student Tech Team Conference! We hope you have fun, learn a lot, and find yourself inspired to do more with the opportunities provided to all through the MLTI.**

As you attend sessions please be an active participant - speak up, ask questions, and always be thinking, "How can this be used at my school and in my life?" The presenters have worked long and hard to be ready for this big day, so show you appreciation and interest by jumping in and trying new ideas and sharing your own thoughts.

If you are a student, be thinking about how you will share what you learn. Share with other students and teachers. Maybe it will will be important that the Principal sees some of the new ideas you will bring back from the conference!

If you are a teacher, be thinking about how you can make use of what you learn in your own classroom, and how other members of your school community might also benefit from knowing about these new tools and possibilities.

And as you attend sessions, please be thinking about

how the conference could be even better - you'll have a chance to give feedback, and we want to know!

**Like last year, we will all start the day in the Hutchins Concert Hall in the Collins Center for the Arts.** This means it's a good idea to use the restrooms and grab refreshments before we start, as after a brief opening keynote (8:40 AM - 9:10 AM), we'll break out across campus for Block 1 & Block 2.

**There are many sessions offered** in Block 1 & Block 2 across the UMaine campus, but there is always a chance that you won't get your first choice.

**Don't panic** - there will be lots of good stuff going on, maybe right next door, and there is a good chance there is room for you there.

**A great way to plan for the conference is to pick 2 or 3 sessions in Block 1 & Block 2** that will be of interest to you. That way, you'll already know where you'll want to be.

**Also, be sure you know about LOCATIONS!**
Knowing what session you want to be in is important, but you also need to know the name of the building and where that building is located, as well as room number! Use the maps included in this notebook to get yourself ready.

**After lunch we'll join back together for Block 3 in the Hutchins Concert Hall for Student Keynote Presenations** & Closing.

Turns out the Girl Scouts & Boy Scouts are right - **Be Prepared!**

## Safety Information Letter - Everyone please read

TO: All Schools Participating in the MLTI Student Conference on May 22, 2014
FROM: MLTI Student Conference Planning Committee
Date: April 17, 2014
SUBJECT: General Safety Information for May 22, 2014

First off, thanks for making it possible for your students to be part of this day.

In 2008, following the door prizes, it was discovered by one of the chaperones that a student was not with their group. As one can imagine a rather frantic 12 minutes followed as folks fanned out to search. The student was quickly located -- safely sitting on his school's bus, waiting to go home!

In order to avoid a repeat of this event, and recognizing that the MLTI Student Conference is different than a traditional school outing, we established the following basic guidelines that we ask all school groups to follow again this year.

1. **All chaperones that come to the conference must stay connected to their students, and all students must stay connected to their chaperones**.

2. **By "connected" we mean that at least one adult knows where any given student is at any time, and students are sure their whereabouts is known.**

3. **Each school will designate a cell phone** as the primary contact for your school team. In other words, if a parent or the school needs to reach any member of your school team on May 22nd, this will be the primary contact number.

4. **Each school will provide that primary contact number to the Registration Desk** when picking up their registration packet so that we will have the ability to connect.

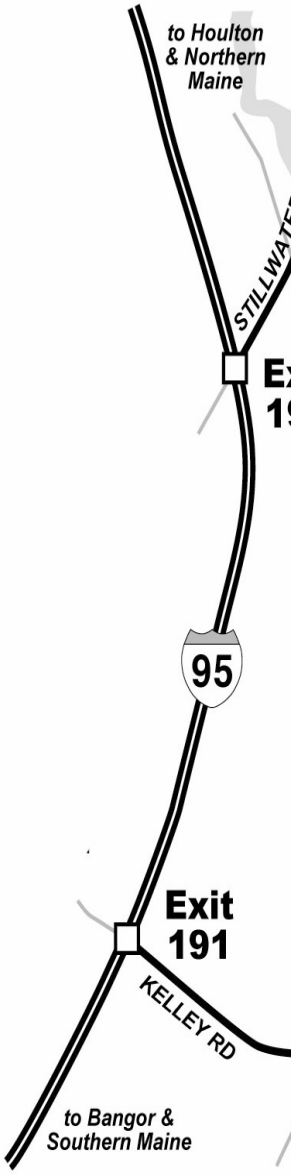
5. **The person carrying the designated contact phone** for the school team will have the numbers of any cell phones that will be with students or adults at the conference. We have also created a space on the Conference Locations Map where your Team's cell phone numbers can be listed, meaning everyone will have those numbers available to them at all times.

6. **We will have a cell phone at the Registration desk.** This number will be distributed to all participants. **It is: 207-949-0635** This number is printed on the Conference Locations Map.

7. **If a student gets separated from their school group,** or simply wants a quiet spot during this very busy day, the lobby of the Collins Center for the Arts, where the day will begin, will be the designated "lost & found" spot for everyone. Please empasize that students should **not** head for their school's bus. The registration desk will be staffed throughout the day, and there is some seating available. **As noted above, the phone number for the Registration Desk is: 207-949-0635**

8. **At the opening session, participants will be introduced to UMaine Student Volunteers** who will be dressed in a clearly identifiable way, and will be around campus all day, ready to help any participant.

## DIRECTIONS TO
## COLLINS CENTER FOR THE ARTS
## UNIVERSITY OF MAINE - ORONO




I-95 to Exit 191 – Kelley Road.

If traveling from the South, turn right at the end of the ramp. If traveling from the North, take a left at the end of the ramp.

Continue to U.S. Route 2 (this road is also Main Street, Orono). Turn left onto U.S. Route 2 - Main Street. Near the center of town, you will pass a fire station and a convenience store on the left, and cross a bridge shortly after that. The University Inn Academic Suites will be on your left just after the bridge. Stay to the right and bear right at the traffic light across from the University Inn Academic Suites onto Park Street (a continuation of U.S. Route 2).

The Park Street entrance to the University of Maine is located on the left about one-half mile after the traffic light. Turn left into campus, just before Bangor Savings Bank. Bear left at the first fork in the road. The Collins Center for the Arts is located just ahead. Parking is available throughout campus for visitor and conference parking in lots marked Commuter (C - Black).

**Parking Permits** are not required if a parking area is reserved for your conference or meeting. In lots that do not have reserved areas, permits are required and are available fr vices, the Visitor Center at Buchanan Alumni House, Bear Necessiti Arena, UMaine Public Safety Office and the Student Service Center in th

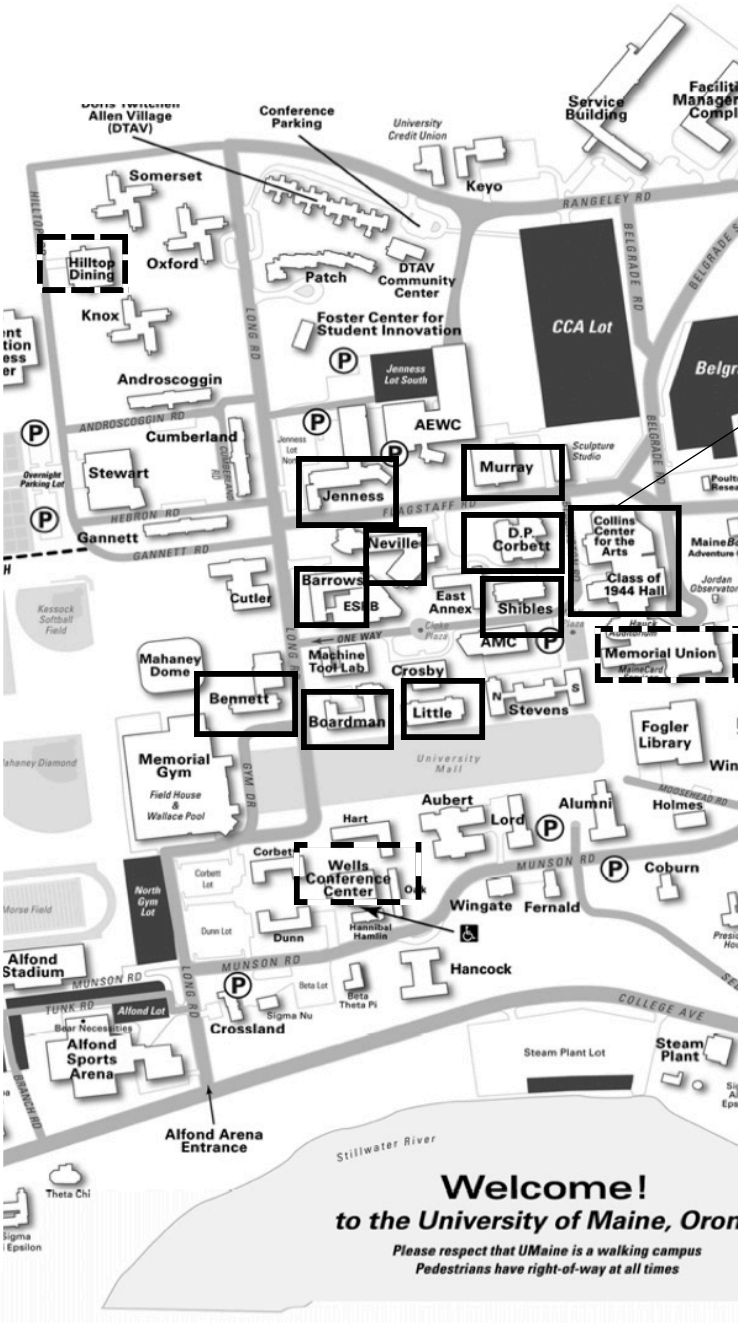
If you have any special needs or questions, please call :
Conference Services Division at tel: 207-581-4092
The Department of Public Safety (24 hours daily) on campus at 207-581-

We hope you enjoy your time on our campus!

Collns Ctr Directions Map.pdf

List your school teams name and cell phone numbers here

11th Annual MLTI Student Conference



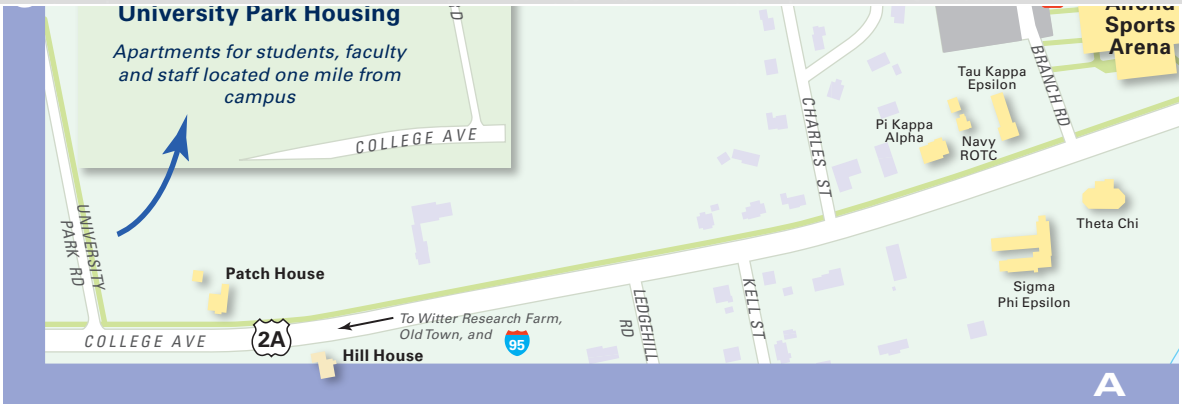

To contact the Registration Desk on the day of the Conference Call 207-949-0635

## 2014 Conference Locations Map

2014 MLTI Buildings Map .pdf

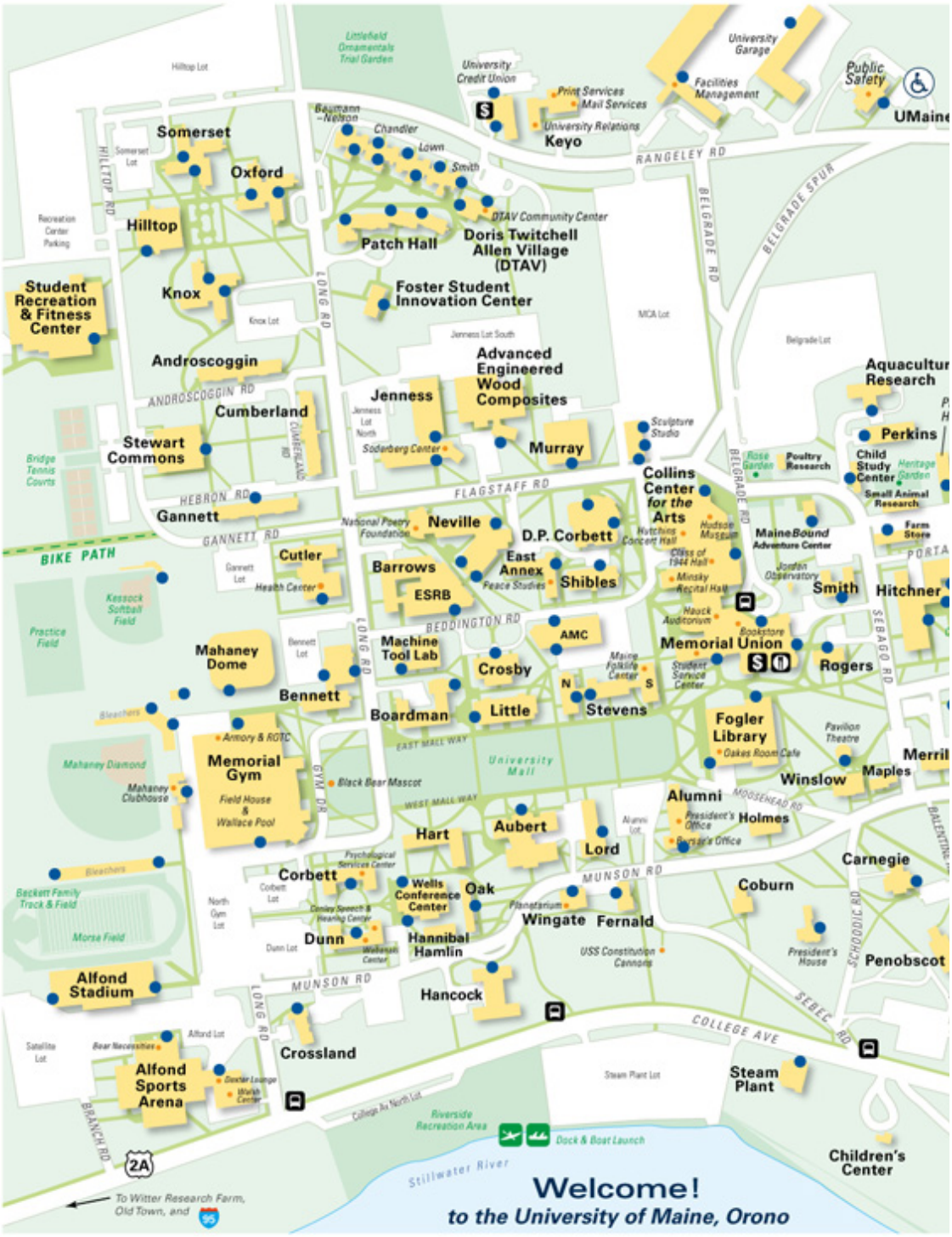

A
1
2
3
4
5
1865 THE UNIVERSITY OF MAINE
2013–14 Campus Map
VISITOR permits authorize parking in any black lot or visitor space.
RED (Resident Student) permits authorize parking in red lots.
BLACK (Commuter Student) permits authorize parking in black lots.
BLUE (Faculty/Staff) permits authorize parking in any blue or black lot.
GREEN (Carpool) permits authorize use of individually allocated spaces.
Permits MUST be displayed on interior mirror.
Signs governing lots take precedence over all maps and permits
Information
Public Bus Stop
Ambulance
Emergency Phone
Visitor Parking
Visitors need permits. Visitor Permits allow parking in any BLACK lot and they are available free from:
• Visitors Center in Buchanan (F–5)
• MaineCard Services in Memorial Union (D–3)
• UMaine Police (E–1)
• Bear Necessities in Alfond (A–5)
To Old Town
BIKE PATH
To campus
RHODE ISLAND ST
VERMONT ST
CONNECTICUT ST
NEW HAMPSHIRE ST
UNIVERSITY PARK R
MASSACHUSETTS ST
Infant & Toddler Programs
Hilltop Lot
Somerset Lot
HILLTOP RD
Recreation Center Parking
New Balance Student Recreation Center
Demeritt University Forest and Trail System
TRAIL 3
Bridge Tennis Courts
Overnight Parking Lot
BIKE PATH
Soccer Practice Field
Field Hockey Pitch
Kessock Softball Field
ALFOND WAY
Additional Emergency Phone on Bike Path
Bike Path continues to University Park Housing, Witter Research Farm and Old Town
Practice Fields
Mahaney Concession
Bleachers
Mahaney Diamond
Mahaney Clubhouse
Palmer Lounge
Mitchell Batting Pavilion
Soccer Field
Bleachers
Beckett Family Track & Field
Morse Field
Alfond Stadium
TUNK RD
Bear Necessities
Satellite Lot

# Blank UMaine Campus Map




[2014-Campus-Map.pdf]

# UMaine Accessibility Map



## UMaine Accessibility Map

UMaine_Accessibility-2.pdf

## Health Care for Conference Attendees ~ 2014

**Cutler Health Center ~ University of Maine Campus**
Monday - Thursday 8 AM - 5 PM
Friday 8 AM - 5 PM
Tel: 207-581-4000

After hrs, 207-581-4000 for call back from on-call physician
or go to EMMC Walk-in Care

Cash, Bill 3rd party Insurance except Medicare
Insurance benefit cards (pre-tax dollars)

**EMMC Walk-in Care**
915 Union Street, Suite 4, Bangor
Monday – Sunday 8 AM - 7 PM
Tel: 207-973-8030

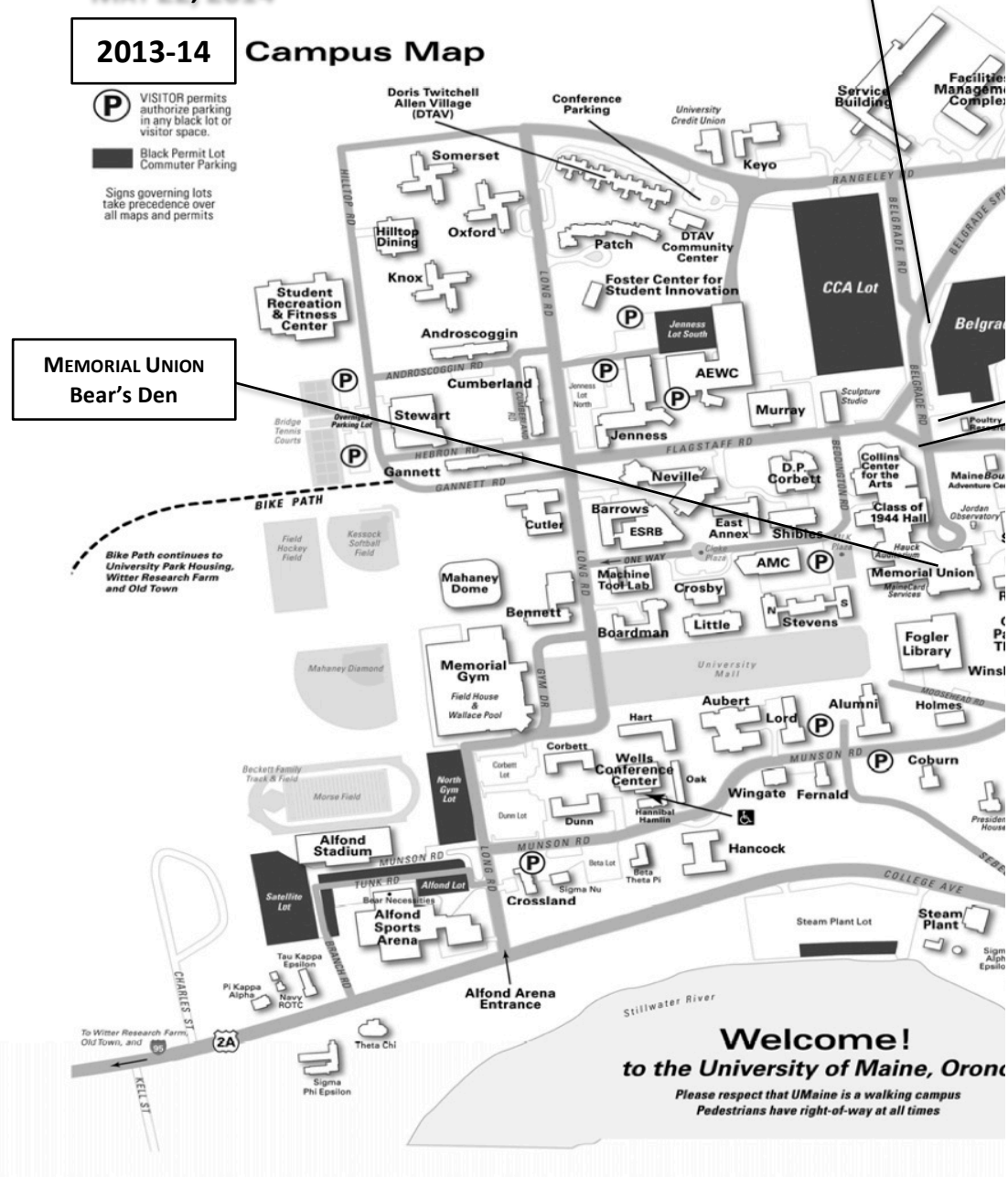
**Eastern Maine Medical Center**
489 State Street, Bangor
24 Hour Emergency Care
tel: 207-973-8000

**St. Joseph Hospital**
360 Broadway, Bangor
24 Hour Emergency Care
tel: 207-907-3000

**MLTI STUDENT LAPTOP CONFERENCE**
**BUS DRIVERS MAP**
**MAY 22, 2014**

**STUDENT DROP-OFF AND PICK-UP IN**
**LOT NEAR COLLINS CENTER FOR THE**
***PLEASE DO NOT STOP BUS IN FRON***
**BUS PARKING IN OUTER BELGRA**

**MEMORIAL UNION**
**Bear's Den**



## Bus Parking & Pickup Map - Chaperones & Bus Drivers

MLTI Bus Driver's Map 2014.pdf

No parking permit is needed for buses, but this permit can be used for all other vehicles bringing participants to the conference.

THE UNIVERSITY OF MAINE

**VISITOR PARKING PERMIT**

Valid in Black Commuter/Visitors lots only on
**May 22, 2014**

# MLTI STUDENT LAPTO CONFERENCE

Parking in fire-lane, handicap, loading-zone, non-paved areas, or service vehicle areas ( is expressly prohibited; vehicles in violation will be cited and removed at owner's expense. I permit during the entire conference will result in the vehicle being ticketed and possibly towe

**Parking and Transportation Services**
**523 Doris Twitchell Allen Village, Community Center**
**Telephone: 581.4047**

**Please display on front right corner of dash of v**

THE UNIVERSITY OF MAINE

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**523 Doris Twitchell Allen Village, Community Center**
**Telephone: 581.4047**

**Please display on front right corner of dash of v**

2014 MLTI PP.pdf

Do you have all signed and dated permission slips?

Have you faxed or emailed a scanned copy of the signed Photo Release Forms to Juanita Dickson? (Fax: (877) 494-MLTI (6584), Email: juanita.dickson@maine.gov). *(We will need to file original copies of these forms, so please retain the original - Originals can be mailed to the Department or dropped off at the Student Conference Registration table but we do need to receive a copy of these PRIOR to your arrival at the Conference.)*

Have you worked with your Team to make plans for independently responsible power management? There will not be many opportunities to charge devices at UMaine and most students will want to use their device throughout the day.

Have you given the students a list of what to bring, and helped them prepare to get through the day without a backpack?

Have you printed a copy of the 2014 Conference Locations Map for each student & chaperone?

Do you have contact information for each student and yourself?

Did you go over the session schedule with your students?

Do your students know which Block 1 & Block 2 sessions they are attending?

Do your students know where the Block 1 & Block 2 sessions they are attending will be located?

Have you worked with your technology staff, if necessary, to remove any proxies? Networkmaine reminds all participants: *"In order to prevent participant connectivity problems, site administrators should remove any HTTP proxy settings on devices that will participate at the 2014 MLTI tech conference before they arrive."*

Did you remind the students to charge their devices and bring them along to the conference? Did you remind them to also bring their power adaptors?

**Double Check:** Have you worked with your technology staff, if necessary, to remove any proxies. Networkmaine reminds all participants: *"In order to prevent participant connectivity problems, site administrators should remove any HTTP proxy settings on devices that will participate at the 2014 MLTI tech conference before they arrive."*

**Double Check:** There will not be many opportunities to charge devices at UMaine and most students will want to use their device throughout the day. Have you worked with your Team to make plans for independent responsibility for power management?

Did you go over the Conference Locations Map? (Does each student have a copy on their device and a printed copy? We'll have some available at the conference, but it's best to familiarize yourselves ahead of time).

Do you have a common meeting place for touching base with your students, for example to meet before lunch? To meet before Block 3? To meet if someone is lost?

Did you give your students a list of which chaperone will be where if needed, and a list of contact cell phone numbers?

Have you made plans for your students to stick together in groups?

Do your students have their devices & chargers?

Do your students have your cell phone number, those of other Team members, and the number (207-949-0635) that will be at Registration for the day?

Do your students each have a copy of the Conference Locations Map?

Have you made clear the importance of heading to the Registration area if any student gets separated from the group?

Do all of your chaperones have a list of all students, and a list of the ones in their group for the day?

Do your students know which sessions they wish to attend? Do you know which sessions they plan to attend?

Have you had discussions amongst your Team about respect and Conference behavior, reminding all that they will be Ambassadors for your School?

Have you reminded your students to care for and keep track of their devices throughout the day?

One teacher will stop at the Registration Table in the lobby of the Collins Center of the Arts to collect the registration materials. This person will be responsible for **providing a cell phone number** for contact throughout the day as well as all original signed copies of the Photo Release Form.

Students should continue through the lobby into join the line to receive their MLTI Student Conference T-shirt.

Name tags (from the registration materials) should be distributed, and students should place them in plain sight on their torso.

Let everyone know where they will be eating lunch. Your Team will be assigned either to The Bear's Den in Memorial Union, Wells Central, or Hilltop Dining. Tickets will be provided in the registration packet. These cannot be replaced if lost.

Make **sure** all Team members are clear about where they will eat lunch, and have located it on the 2014 Conference Locations Map.

After having a snack in the lobby, your group should find seats (together) in the Hutchins Concert Hall. You will have been assigned to either sit in the lower or

upper seating section.

Communication, cell phone numbers, and common meeting places should be addressed again.

Make **sure** all students have cell phone numbers of adults in your group and the Conference Registration Table number. (207-949-0635)

Make **sure** you have all of your students' cell phone numbers.

Make **sure** all Team members have a printed copy of the 2014 Conference Locations Map.

In your registration packet will be found lunch "tickets" for the space your Team will be eating in.

Do your students have their devices securely placed a safe distance from their lunch?

Are all of your students accounted for?

Talk to your students about what they have seen during the day, and how innovative ideas can be brought back to your school.

Make sure all students and adults leave the lunch area in time to be back in the Hutchins Concert Hall for the Block 3 which will begin promptly at 1:25 PM. Best to be a "little early..."

Do you have all of your Team members accounted for?

Does everyone have their MLTI Device?

Does everyone have their personal belongings?

**Double check** to make sure all of your Team members are accounted for!

Do your students have their MLTI Devices?

Do they have their personal belongings?

How will you and your students share your enthusiasm about the 2014 MLTI Student Conference with the rest of your school community?

## *Conference Schedule: Opening Session; Block 1, 2 & 3 Sessions;* 23

## General Conference Schedule

8:00 AM - 8:40 AM - Registration (Collins Center for the Arts )
Refreshments, check in & pick up conference materials

8:40 AM - 9:10 AM - Welcome and Opening Keynote (Collins Center for the Arts )

9:20 AM - 10:40 AM - Block 1 Workshops (Various Campus Locations)

10:50 AM - 12:10 PM - Block 2 Workshops (Various Campus Locations)

12:15 PM - 1:20 PM - Lunch (Please pay attention to your assigned lunch location!)

1:25 PM - 2:10 PM - Block 3 Student Speakers (Collins Center for the Arts )

2:10 PM - 2:40 PM - Closing (Collins Center for the Arts)

## *Opening Session/Keynote*

### *Why Maine Matters: Managing Change in a Complex World*

**Alan Lishness, Gulf of Maine Research Institute**
**Keynote Speaker**

For the past 26 years, Alan has worked at the Gulf of Maine Research Institute, presently serving as Chief Innovation Officer. Prior to GMRI, he co-founded wind energy, solar and aerial photography businesses, managed energy programs at the Maine Audubon Society and marketed a/v and computer graphics for a Portland-based company. He's interested in architecture, high-performance cars, international travel and making things.

Alan will quantify the relentless pace of change in the development and deployment of new technologies and software, including mobile phones, computers, digital photography and social networks. His keynote will ecompass all of Maine's history of innovation and invention, focusing on photographic processes, land speed-record cars, modern weapons, international trade and the construction of complex structures. Alan will demonstrate to students that Maine people are self-reliant, inventive, tinkerers and global citizens, all dispositions that are important in a rapidly-changing world.

Alan_SC_Web.jpg

# 11th Annual MLTI Student Conference
# May 22, 2014 - Block 1 & 2 Sessions
# (Locations & Descriptions)

Below are sessions being presented during Block 1 & 2 at the 2014 MLTI Student Conference.
All sessions repeat both Block 1 & 2 unless otherwise indicated!!

**Hour of Code: How One School Participated and Your Entry into Coding**
**Presenter:** Mike Arsenault, Yarmouth School Department
**Platform(s):** HP ProBook, Apple iPad, Apple MacBook Air
**Location: D.P. Corbett, Room 100**

Come learn how Frank Harrison Middle School in Yarmouth participated in the Hour of Code project and start your journey into coding. This session will begin with a brief presentation on how Frank Harrison Middle School partnered with local businesses to bring coding professionals into our school to mentor our students during the Hour of Code. After the short presentation, participants will complete an hour of coding activities using the resources provided on the Hour of Code web site. Whether you've never done any coding before or have done some coding you'll have resources that can be used to develop new coding skills.

**Software/Downloads:** A web browser (i.e. Safari, Google Chrome, Firefox or Internet Explorer). The following applications require an install. These will not be necessary to participate in this session: Alice, LiveCode, Looking Glass, Hopscotch (iOS), Code Academy (iOS), MIT App Inventor (Android), Lightbot (iOS or Android)

==========

**Tynker - Programming with Logic**
**Presenter:** Sean Malone, RSU #68
**Platform(s):** HP ProBook, Apple iPad, Apple MacBook Air

**Location: Bennett Hall, Room 141**

Tynker is the answer to those who love the Scratch programming language but want to enter the third dimension. Tynker is platform friendly ranging from iOS & OSX to Windows. The possibilities of Tynker allow the programmer to build a

program from scratch or complete challenges for all to take part in. No skill level is necessary so if you are just beginning in the programming world to the coding master; there is something for everyone.

**Software/Downloads:** Tynker can be downloaded from tynker.com or as an iPad app

==========

**Learning to Code With Python**
**Presenter:** Michael Murphy, John Bapst Memorial High School
**Platform(s):** HP ProBook, Apple MacBook Air

**Location: Barrows Hall, Room 119**

In this session, participants will learn basic algortihms and produce a number of simple programs using the python programming language. This is a great language for introductory programming learners, because of the short time it takes to get a whole program functioning. Students will learn how to create both interactive programs and how to build self-contained mathematical algorithms. The session will touch on, loops, counters, (pseudo)randomization, conditional feedback and text line parsing/interpretation.

**Software/Downloads:** Python 2.xxx

==========

**Programming the NXT Robot for Immediate Success!**
**Presenter:** Tom Bickford, Maine Robotics
**Platform(s):** HP ProBook, Apple iPad, Apple MacBook Air

**Location: Jenness Hall, Room 100**

Programming in only three letters... FUN! Learn how to use computer programming to run a LEGO robot around the room; use LOOPS, CONDITIONAL STATEMENTS, and SWITCHES to sense the robots environment and change it's behavior; all from a program that YOU write.

You'll be a programmer in just a few minutes and downloading to the robots in a few more. Then spend the rest of the session adding skills to get your robot to do more interesting and complex tasks! You might ask "What can it do?" only to find out it can do whatever you want it to do.

**Software/Downloads:** Any device that has the LEGO MindStorms software installed will be able to participate using their device. HOWEVER, we will also have a number of Windows machines in the room for student use.

==========

**Games in Java & Animation in Scratch**
**Presenter:** Nola Urban, Westbrook Middle School
**Platform(s):** HP ProBook, Apple MacBook Air

**Location: Barrows Hall, Room 130**

We plan to use Java to show how one might design a game and publish it using Eclipse so that others may also play the game. We also plan to show how one might use Scratch to animate and to code music to accompany the animation.

**Software/Downloads:** Scratch and Eclipse

==========

**Creating a Fun Student Project on Kodu**
**Presenter:** Michael Cummings and Keith Partington, Microsoft Corporation
**Platform(s):** HP ProBook

**Location: Boardman Hall, Room 310**

Kodu lets kids create games on the PC and Xbox via a simple visual programming language. Kodu can be used to teach creativity, problem solving, storytelling, as well as programming. Anyone can use Kodu to make a game, young children as well as adults with no design or programming skills. This session will provide an overview and demonstration of the Kodu platform. A sample project will be shared to provide an example for students to get started on their own fun project.

**Software/Downloads:** Kodu

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**An Hour of Code ... and Beyond**
**Presenter:** Jay Collier, Educate Maine
**Platform(s):** HP ProBook, Apple iPad, Apple MacBook Air

**Block 1 Only!**
**Location: Little Hall, Room 120**

Have you finished an Hour of Code? Two hours? More? Come join us and share your favorite games and tutorials with other students and see some you may not have tried yet. In this workshop, we'll show about 20 minutes of cool demos from Code.org, Robomind, Grok Learning, Make Games With Us, Touch Develop, App Inventor, Codecademy, and Processing. Then, we'll have time for you to show and tell the games you like best. After, we'll have free time to explore. Be sure to bring the coding projects you love the most.

**Software/Downloads:** Web Browser, Scratch

==========

**Weaving the Web: Creating Your Own Webpages!**
**Presenter:** Laura Gurney, Husson University
**Platform(s):** HP ProBook, Apple MacBook Air

**Block 2 Only!**
**Location: Little Hall, room 120**

The "Web" has become an important part of life. Don't believe, try being disconnected for a few days! Sites such as Facebook, Amazon, Google, among others, offer users communication, entrainment, and knowledge. Creating your own online presence is easier than you think. Explore basic HTML and CSS markup to create webpages and JavaScript to add interactivity.

**Software/Downloads:** Web Browsers (Chrome or Firefox) and Text Editor ( Textwrangler (Mac), NotePad++ (Windows))

==========

**Learn To Program By Teaching Toddlers How To Use Microwaves**
**Presenter:** Josh Komusin, UNUM
**Platform(s):** HP ProBook, Apple MacBook Air

**Location: D.P. Corbett, Room 105**

Programming is all about getting computers to do cool, useful things. The only problem is, computers have no idea what is "cool", or what is "useful". So how can we tell them to do those things? Well, it turns out that it's pretty simple: computers

are basically perfectly-behaved toddlers with photographic memories. So let's find out how to put them to work!

This workshop will show you how to break a task down into simple pieces, and then build useful solutions from those building blocks. With that, you'll have the knowledge you need to create useful tools for services and web sites you use every day!

**Software/Downloads:** PyCharm (the free Community edition), however any Python IDE or editor will work.

==========

**Working with Lua [In Computercraft]**
**Presenter:** Stephen Kaplan, Marshwood Middle School - Coding After School
**Platform(s):** HP ProBook, Apple MacBook Air

**Block 1 Only!**
**Location: Boardman Hall, Room 210**

In this workshop, we'll be starting with the very basics of Lua and working our way to creating great and useful programs. We'll be learning about Lua and why it is a useful coding language, conditional statements (If/else), input and output codes, functions, colors, loops, and more. Join us as we embark into the coding language of Lua!

**Software/Downloads:** Love 2D ( https://love2d.org) and CCEmulator (https://github.com/Sorroko/cclite/releases/tag/1.0.0)

==========

**Writing cyphers with Java**
**Presenter:** Edward Sihler, University of Southern Maine
**Platform(s):** HP ProBook, Apple MacBook Air

**Location: Murray Hall, Room 106**

Create a cypher machine in JAVA, how to break mon-alphabetic substitution cyphers. Learn the basics of an WWII style encoding machine and how these machines were part of the world of computers we have today.

**Software/Downloads:** Java compiler

==========

**Using Scratch to Solve Real-World Problems**
**Presenter:** Elizabeth Chabe, High Touch Courses
**Platform(s):** HP ProBook, Apple MacBook Air

**Location: Bennett Hall, Room 140**

Designed for students with no prior coding experience, this workshop starts with demonstrating live examples of how programming can solve real-world problems. Working in small groups paired with a rockstar coding mentor, we quickly get to work solving our own real-world problems inspired by the fields of health care, cryptography, and forensics. Students leave the session with the start of a Scratch-based application that solves an assigned problem.

**Software/Downloads:** Scratch, web browser

==========

**Hacker Club**
**Presenter:** Benjamin Schrader, Hacktivate
**Platform(s):** HP ProBook, Apple iPad, Apple MacBook Air

**Location: Bennett Hall, Room 137**

This is a workshop where you determine the content. Bring your project or your interests and be ready to share with others. No worries, no one will present to everyone. Expect good questions. Ask good questions. Listen. Inspire, and be inspired.

Includes a mini-hackathon. Challenges will be announced. Tools and supplies will be provided. You may collaborate together, work independently, or just watch. Then learn from others' solutions.

**Software/Downloads**: Arduino software is recommended but not required.

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**An Introduction to Javascript**
**Presenter:** Gerald Wright, Husson University
**Platform(s):** HP ProBook, Apple MacBook Air

**Block 1 Only!**
**Location: D.P. Corbett, Room 115**

This workshop uses the Code Academy JavaScript tutorials to introduce students to the basic building blocks of writing software. Topics covered include functions, looping and control structures, and how to fight a dragon.

**Software/Downloads:** Web browser

==========

**Coding in Codea**
**Presenter:** Gerald Wright, Husson University
**Platform(s):** Apple iPad

**Block 2 Only!**
**Location: D.P. Corbett, Room 115**

Have you ever looked at an app on the iPad and wondered how they did that?
Have you ever thought that you had the perfect app for the iPad?
Do you just want to learn more about building apps for the iPad?

Codea lets you create games and so much more for the iPad. If you can think it, then you can create it. Changing colors, graphics, sounds and more is only a touch away using the Codea editor.

**Software/Downloads:** Codea license

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**Programming Fun with Code.org**
**Presenter:** Michele Charette, Medway Middle School
**Platform(s):** HP ProBook, Apple iPad, Apple MacBook Air

**Location: Neville Hall, Room 100**

Whether you want to spend an hour working with code or twenty hours, we have a program for you. Come dabble in code and learn some basic skills that will take you further. Teachers can set up accounts for students and be able to monitor their progress as they work through the course.

**Software/Downloads:** n/a

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**An introduction to Computer Programming in Minecraft**
**Presenter:** Jeff Mao, Department of Education
**Platform(s):** Apple MacBook Air, HP ProBook

**Location: Neville Hall, Room 101**

Thousands of people are creating and exploring in the world of Minecraft. Did you know that with a simple mod pack, ComputerCraft, that you can build computers and robots (called turtles) in Minecraft? Using programs that you write for these computers and turtles, you can expand what is possible in Minecraft. This session is for the newbie computer programmer or the Minecraft veteran that has not yet tried the ComputerCraft mod.

**Software/Downloads:** Attendees of this session must have an exisiting Minecraft account.

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**Codea**
**Presenter:** Chris Wilson, University of Maine
**Platform(s):** Apple iPad

**Location: Murray Hall, Room 102**

Come learn about programming on the iPad with Codea. Students will learn how to create their very own application for the iPad. No previous programming experience is needed. Students will learn how to get started as well as do some drawing to the screen.

**Software/Downloads:** Bring a keyboard if you have one!

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**Supercomputing and Cloud Computing**
**Presenters:** Sam Winchenbach & Steve Cousins, University of Maine
**Platform(s):** Apple iPad, Apple MacBook Air, HP ProBook

**Block 1 Only!**

**Location: Little Hall, Room 140**

You've heard the expression "Cloud Computing" or "It's in the Cloud"...come see what that is all about. This session is being led by University of Maine experts in Supercomputing and Cloud Computing. They'll give you an introduction to what Supercomputing and Cloud Computing is all about and lead you through the process of creating a virtual computer in the Cloud.

**Software/Downloads:**

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**Netlogo**
**Presenter:** Bruce Segee, University of Maine
**Platform(s):** Apple MacBook Air, HP ProBook

**Location: Little Hall, Room 130**

This session will provide an introduction to the Netlogo programming environment. Netlogo is an agent-based programming language that can be easily learned by middle schoolers, but is used by Univeristy graduate students as well. This session is limited to machines with Netlogo installed.

**Software/Downloads:** Netlogo

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**Start Developing iOS and OS X Apps Today**
**Presenter:** Tim Hart, Apple
**Platform(s):** Apple iPad, Apple MacBook Air

**Location: Shibles Hall, Room 202**

Although the task of developing an app may seem daunting, the process can be reduced to several digestible steps. With so many wonderful technologies available to today's coder, there has never been a better time to pick up programming. This session will help you get started and guide you in the right direction as you develop your first app.

**Software/Downloads:** Xcode

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**Calling All Inventors - Start Programming with Arduino!**
**Presenter:** Abby Stiers
**Platform(s):** HP ProBook, Apple MacBook

**Location: Little Hall, Room 110**

Would you like to build a device that senses when someone sneaks into your room and sends you a text message? How about a shirt with turn signal lights on the back, for riding your bike? People have built these and more with arduino microcontrollers.

A microcontroller is like a tiny portable (even washable) computer that can take information from any kind of sensor to control lights, motors and other electronics. Arduino microcontrollers come in all shapes and sizes and are designed to be easy to program so anyone can invent new devices. In this super fast-paced workshop, you will build a basic project, while learning concepts and skills necessary for designing and building more
complex projects.

**Software/Downloads:** Arduino boards will be available for student use.

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**Using Filemaker to Build Relational Databases**
**Presenter:** Curtis Armstrong, Apple
**Platform(s):** Apple MacBook Air

**Block 2 Only!**
**Location: Boardman Hall, Room 210**

In our data-driven world, we need to be able to take disparate chunks of data and relate them to each other. In this session, we will explore ways to use Filemaker to design, build and have some fun with relational databases. We'll take sample data and build a database, explore different layout options, build data input forms and look at different ways Filemaker could be used for personal organization as well.

**Software/Downloads:** FileMaker 13 Trial

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**Make That Cat Walk with Scratch**

**Presenter(s):** Linus Obenhaus & Jon Graham, Oak Hill Middle School
**Platform(s):** HP ProBook, Apple MacBook Air

**Block 2 only!**
**Location: Little Hall, Room 140**

Scratch is a web-based application designed to introduce you to programming in an easy-to-learn and fun way, by organizing code into understandable blocks. You can do so much with Scratch. You can create games, animations, music, and almost anything you set your mind to. In this session, and experienced Scratch user will guide you through the processes of making your own project as well as building off of others' projects.

**Software/Downloads:** Scratch

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**Scratch Day in Maine**
**Presenter(s):** Jo Gates, Maine Mathematics and Science Alliance
**Platform(s):** HP ProBook, Apple MacBook Air

**Location: D.P. Corbett, Room 117**

What can you do with Scratch? Scratch is a fun, visual programming language. It's used to create interactive stories, games, and animations.

This Scratch session is for beginners to those who have some experience with Scratch. Have a story you want to tell? Want to learn to code? Do you want to make your own games? Interested in getting involved in an active, fun, awesome online community? Scratch can do that! We'll create a collaborative project, talk about some practical Scratch projects like virtual tours and informative guides, and share tips and methods to make your Scratch projects even better. We'll also share stories from the first Scratch Day events in Maine, held May 17, 2014.

Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab. It is provided free of charge, and runs on devices. A similar program, SNAP!, is available for tablets but will not be included in this session.

**Software/Downloads:** Scratch

We are close to 1000 participants to UMaine for the 11th Annual MLTI Student Conference on May 22nd. Because of the number, we have worked with Dining Services at UMaine to serve lunch in three locations. The information here will help participating schools be better prepared for their college-style dining experience.

Conference participants will be eating at Hilltop Dining, Wells Central & The Bear's Den in the Memorial Union. Your school group will have been informed via e-mail to the lead contact prior to the conference as to where your Team will be eating lunch. Schools will receive an appropriate dining pass for each participant in registration packets on May 22nd.

Do not lose your dining pass! They are required for lunch, and are valid only at the specified venue, either Hilltop Dining, Wells Center, or The Bear's Den.

Diners eating at Wells Central or Hilltop Dining will be in a "buffet" setting.

Diners eating at The Bear's Den will be making personal choices, and will have to "do some math" as they make their selections. Each participant eating at the Bear's Den have been given a "dining card" with a

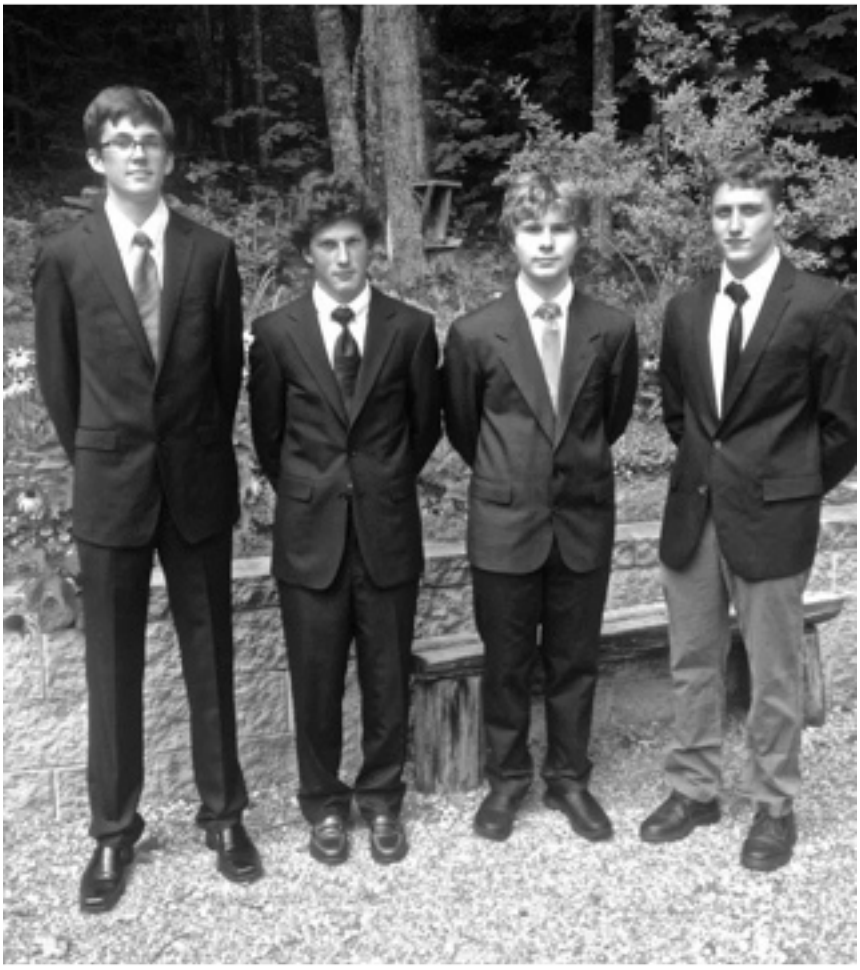
cash value of $8 on it. Dining at The Bear's Den is "a la carte," meaning that each item is individually priced. If a diner goes over the $8 on their card, they will have to pay the difference.

There will be several UMaine Dining Services staff directing and assisting students to help you keep on your budget, but it would probably be a good idea if folks eating in The Bear's Den had a few dollars in their pocket just in case they go over...

## Block 3 (1:25 PM - 2:10 PM)
## Student Speakers

**Project RoboGoby**
Limbeck Engineering LLC - Liam Wade, Nick Nelsonwood, Josef Biberstein, and Travis Libsack (pictured below, l-r), Freeport High School

RoboGoby is a collaborative submersible ROV project spearheaded by Limbeck Engineering LLC, a partnership of four high school students from Freeport High School. The goal is to develop an affordable ROV with both scientific and commercial applications. The ROV is based on an embedded linux platform, with Arduino derivative micro-controllers that will manage various sensors and motors.



RoboGoby will have five degrees of maneuverability and will be capable of depths over 250ft. The ROV will have a variety of sensors (including temperature, depth, etc), stereoscopic cameras, advanced lighting, and will house an expandable payload bay for mission specific equipment.

A unique feature of RoboGoby will be its ability to remotely station keep while wireless streaming live video and data. Over the past year Limbeck Engineering has kept a blog with more specific information on the project. If you'd like to learn more about what we're doing, please check

out the blog before the conference (http://robogoby.blogspot.com).

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**Coding After School**
Stephen Kaplan, Marshwood Middle School

Stephen will be presenting a keynote that tells of his journey creating the Coding After School program, along with how he got started coding, and how others can start similar programs at their schools. Using examples, he will give an overview of the lessons he has created and share some student-created work. He will share future plans and improvements to the program and how the program has developed since its initial creation.

Stephen Kaplan is an eighth grade student at Marshwood Middle School in Eliot, Maine who loves to code. Having grown up in South Berwick, Maine, Stephen is a deepthinker whose interests include coding, school, soccer, and science. He is a part of the school's band and chorus programs. Ever since he was introduced to the idea of code by his sister, Toni, he has challenged himself to create, invent, and become a master of the thing he loves most to do.

He is proficient in many coding languages, including HTML, CSS, and JavaScript, along with Java, PHP, Lua, and more. He has participated in coding classes and advanced schooling classes at M.I.T (Massachusetts Institute of Technology) through their HSSP, Spark, and Splash programs. In 2013, he began a program at the school that had a goal to teach students about the evermore important world of coding. His personal goal for the project was to simply give the students an idea of what the world of code is, but the Coding After School program quickly began much more than that.

After no more than a week after the program began, it became clear that Stephen had created something that was a true culture changer. A few weeks into the program, Stephen was contacted and invited to be a keynote speaker for the 2014 MLTI Conference at the University of Maine, Orono. He will also be presenting two 80-minute workshops on Lua while there. He can be contacted at stephen.kaplan@rsu35.com

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Chris Jones, former student Oak Hill High School

In 2011, Chris Jones came to share his story on how MLTI influenced him to be passionate about technology and education. This year, Chris returns to give us an update on what he's been up to and to share his experiences in college and living in Boston. Focusing in Business Management, Chris will give his perspective on the role of technology and business here in the state of Maine and why it's a great opportunity for young people.

Learn more about Chris Jones

**The closing session will directly follow Block 3, and will also take place in the Hutchins Concert Hall in the Collins Center for the Arts.**

During this session, which will move very quickly, we will:

- Collect feedback. We are always working to improve this conference, and we want to know how the day went for you.

- Drawing for $1000 College Scholarships (middle school only) and more! And before anyone asks, "YES! You do need to be present to win."

- Say "Thank You!" to everyone who has worked so hard to make this day a reality.

- Bid all participants farewell for this year and issue an invitation to come on back for next year's conference!

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